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BRIEFS

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No. 14-1538

IN THE

Supreme Court of the United States

LIFE TECHNOLOGIES CORPORATION; INVITROGEN IP HOLDINGS, INC.; APPLIED BIOSYSTEMS, LLC,

Petitioners,

v.

PROMEGA CORPORATION,

Respondent.

On Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF FOR PETITIONERS

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QUESTION PRESENTED

35 U.S.C. § 271(f)(1) provides that it is an act of patent infringement to "suppl[y] . . . in or from the United States all or a substantial portion of the components of a patented invention, . . . in such manner as to actively induce the combination of such components outside the United States." Despite this Court's clear dictate that section 271(f) should be construed narrowly, *Microsoft Corp.* v. *AT&T Corp.*, 550 U.S. 437 (2007), the Federal Circuit held that Life Technologies is liable for patent infringement for worldwide sales of a multi-component kit made abroad because just a single, commodity component of the kit was shipped from the U.S. The question presented is:

Whether the Federal Circuit erred in holding that supplying a single, commodity component of a multi-component invention from the United States is an infringing act under 35 U.S.C. § 271(f)(1), exposing the manufacturer to liability for all of its worldwide sales.

PARTIES TO THE PROCEEDINGS

Petitioners, Life Technologies Corporation, Invitrogen IP Holdings, Inc., and Applied Biosystems, LLC, were the defendants-appellants below.

Respondent, Promega Corporation, was the plaintiff-cross-appellant below.

RULE 29.6 STATEMENT

Applied Biosystems, LLC, and Invitrogen IP Holdings, Inc., are wholly-owned subsidiaries of Life Technologies Corporation. Life Technologies Corporation is an indirect wholly-owned subsidiary of Thermo Fisher Scientific Inc. There is no other publicly held corporation owning 10% or more of the securities of petitioners.

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The Federal Circuit's opinion is reported at *Promega Corp.* v. *Life Technologies Corp.*, 773 F.3d 1338 (Fed. Cir. 2014), and is reproduced at Petition Appendix (Pet. App.) 1a–43a. The unpublished order denying the petition for rehearing and rehearing en banc is reproduced at Pet. App. 67a–68a. The district court's unpublished opinion is reproduced at Pet. App. 44a–66a.

JURISDICTION

The Federal Circuit entered its judgment on December 15, 2014, and denied a timely-filed petition for rehearing and rehearing en banc by order dated February 26, 2015. On April 22, 2015, Chief Justice Roberts extended the time within which to file a petition for a writ of certiorari to and including June 26, 2015. The petition was filed on June 26, 2015, and was granted on June 27, 2016. This Court has jurisdiction over this case pursuant to 28 U.S.C. § 1254(1).

STATUTORY PROVISIONS

35 U.S.C. § 271(f) provides:

> (1) Whoever without authority supplies or causes to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

(2) Whoever without authority supplies or causes to be supplied in or from the United States any component of a patented invention that is especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use, where such component is uncombined in whole or in part, knowing that such component is so made or adapted and intending that such component will be combined outside of the United States in a manner that would infringe the patent if such combination occurred within the United States, shall be liable as an infringer.

INTRODUCTION

United States patent law has never been intended to restrict the free flow of goods throughout the world. Indeed, the "presumption that United States law governs domestically but does not rule the world" applies "with particular force in patent law." *Microsoft Corp.* v. *AT&T Corp.*, 550 U.S. 437, 454–55 (2007). Congress created a narrow exception to this general rule against extraterritoriality to prevent parties from evading the legitimate territorial reach of U.S. patent law. In 35 U.S.C. § 271(f)(1), Congress defined infringement to include conduct within the United States that all but amounts to infringement, when that conduct is coupled with actively inducing conduct overseas that would be infringement if it occurred within the U.S. The statute's text, structure and history evince that narrow scope and purpose. This Court's prior rulings also emphasize that narrow scope and purpose, and underscore the importance of limiting the extraterritorial reach of U.S. patent law.

In this case, the Federal Circuit badly misinterpreted § 271(f)(1), transforming the narrow exception to the rule against extraterritoriality into a basis for claiming worldwide patent damages whenever any commodity component of a product was sourced from the U.S., even if the product has no other connection to the U.S. The court held that respondent was entitled to infringement damages based on Life Technologies' *worldwide* sales of genetic testing kits, notwithstanding that the only connection the court found between Life Technologies' foreign sales and the United States was that Life Technologies shipped a single, commodity component of the multi-component kits from the United States to its manufacturing facility abroad, where the kits were assembled. The Federal Circuit's rule places U.S. patent law restrictions on products across the globe based on domestic conduct that bears no resemblance to domestic infringement, and does not even come close to what might amount to infringement. No principle of statutory interpretation supports that ruling. It should be reversed.

The text of § 271(f)(1) is narrow. It provides liability only when the defendant supplies "all or a substantial portion of the components of a patented invention" from the U.S. and "actively induce[s] the combination of such components" overseas in a manner that would infringe if the components were so combined within the U.S. The Federal Circuit divorced the phrase "substantial component" from its anchor "all," and misread it to apply broadly to any individual component that is "important" to the operation of the patented device. But the phrase "substantial portion" plainly refers to the quantity, not the subjective importance, of any components supplied. Especially when read in context with "all," the

phrase means a large percentage closely approximating all.

This interpretation becomes even more compelling when the structure of the statute is considered. Section 271(f)(1)'s companion provision, § 271(f)(2), specifies the circumstances under which the qualitative aspect of a single component sourced from the U.S. can be the basis of infringement. Section 271(f)(2) authorizes infringement liability for the supply of a single component, but only if it is "especially made or especially adapted for use in the invention and not a staple article or commodity of commerce." And while § 271(f)(2) consistently uses the term "component" in the singular, § 271(f)(1) consistently uses the term "components" in the plural. When these provisions are read together, it is clear that Congress did *not* intend to impose liability for the supply of a single component unless it was especially made or adapted for infringement and not a "staple article or commodity of commerce." Indeed, this Court has previously noted that § 271(f)(1) and § 271(f)(2) "differ, among other things, on the quantity of components that must be 'supplied from the United States' for liability to attach." *Microsoft*, 550 U.S. at 454 n.16 (alterations omitted).

The Federal Circuit's interpretation is also directly contrary to this Court's explicit instruction that § 271(f) should be narrowly interpreted in light of the presumption against extraterritoriality. *Id.* at 454–55. By allowing United States patent law to intrude into foreign countries' economies when only a single commodity component is supplied from the United States, the Federal Circuit's interpretation both "impinges on legitimate foreign sovereign interests," and threatens "far-reaching implications for U.S. export trade." Brief for the United States as

Amicus Curiae ("U.S. Br.") at 18–19 (alterations omitted). Among other things, an expansive interpretation of § 271(f)(1) would create conflict between American patent law and the policy preferences of foreign sovereigns reflected in their laws, including the patent and antitrust laws of the European Union and other jurisdictions.

Finally, the Federal Circuit's interpretation should be rejected because it is contrary to the purposes and intended effect of the statute. Congress intended § 271(f) to close the "loophole" identified in *Deepsouth Packing Co.* v. *Laitram Corp.*, 406 U.S. 518 (1972), and prevent manufacturers from "circumvent[ing]" U.S. patents by supplying all or a high percentage closely approximating all of the components of an invention domestically, leaving only the trivial step of assembly to be completed abroad. See S. Rep. No. 98-663, at 1, 6 (1984). Section 271(f) was not intended to penalize domestic manufacturers of commodity components based on the worldwide use of those components. Yet, unless the Federal Circuit's interpretation is rejected, such U.S. manufacturers will need to account for the unpredictable and potentially crushing burden of U.S. patent infringement liability for worldwide sales, based on the supply of *any* individual component, however common and useful for non-infringing purposes. The sweeping liability that the Federal Circuit's ruling creates for component suppliers across a broad array of industries will have the anomalous result of pushing the sourcing of components overseas, thereby eliminating manufacturing jobs and hurting raw materials industries in the U.S., directly contrary to Congress's aims and the best interests of the U.S. economy.

This Court can remain faithful to the statute's text, structure, and purpose, and can maintain the stat-

ute's role as a limited exception to the principle against extraterritoriality, by reading the phrase "all or a substantial portion of the components of a patented invention" to mean "all or a large percentage closely approximating all" of those components. Such a reading ensures a substantial amount of conduct approaching infringement occurs within the U.S., and maintains the proper focus of U.S. patent law on U.S. conduct. Such a reading also ensures that U.S. patent liability based on § 271(f)(1) will not interfere significantly with overseas conduct, which comports with the statutory text and purposes and the anti-extraterritoriality principle of U.S. patent law.

STATEMENT OF THE CASE

Life Technologies manufactures genetic testing kits, which generate DNA profiles. Pet. App. 8a. The kits are manufactured in the United Kingdom, and sold worldwide. *Id.* These kits are "useful in many fields," *id.* at 3a; for example, they are "used by law enforcement agencies for forensic identification, and by clinical and research institutions for purposes such as analyzing cancer cells," *id.* at 8a. "The kits contain a number of components, including: (1) a primer mix; (2) *Taq* polymerase; (3) PCR reaction mix including nucleotides; (4) a buffer solution; and (5) control DNA." *Id.*

Together, these components are capable of copying, or "amplif[ying]," the DNA being studied, which is necessary "in order to obtain a detectable amount of DNA for analysis." Pet. App. 3a; JA 135. The primers "mark[] the start and finish" of the area to be copied. Pet. App. 3a; JA 137–138. The nucleotides are the building blocks used to form the copies. JA 138. The buffer solution maintains the conditions needed for the copying to occur. *Id.* The control DNA

is used to verify that the copying process has occurred correctly and without contamination. JA 139. Finally, the "*Taq* polymerase is an enzyme used to amplify the DNA sequences in order to obtain enough replicated sample for testing." Pet. App. 34a; JA 136. Thus, each of the five components plays an important part in the reliable amplification and the accurate testing of DNA samples.

Promega Corporation ("Promega") sublicensed to petitioner the "Tautz patent," which covered technology for generating DNA profiles.[1] Pet. App. 7a. Claim 42 of the Tautz patent claims a "kit" for analyzing DNA samples, comprising five components, JA 127 (col. 16: ll. 45–61):

> (a) at least one vessel containing a mixture of primers constituting between 1 and 50 of said primer pairs;
>
> (b) a vessel containing a polymerizing enzyme suitable for performing a primer-directed polymerase chain reaction;
>
> (c) a vessel containing the deoxynucleotide triphosphates adenosine, guanine, cytosine, and thymidine;
>
> (d) a vessel containing a buffer solution for performing a polymerase chain reaction;

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[1] Promega sued Life Technologies for infringement of five patents that it owned or licensed. The Federal Circuit held that four of those patents were invalid on the ground of nonenablement. Pet. App. 13a–22a. The holding at issue here involves the remaining patent, No. RE 37,984 (the "Tautz patent"), of which Promega was a non-exclusive licensee in some fields and an exclusive licensee in others. *See id.* at 5a. The Tautz patent has expired, but damages concerning alleged infringement before the expiration of the patent in June 2015 are at issue, *see* 35 U.S.C. § 286; JA 165.

> (e) a vessel containing a template DNA . . . for assaying positive performance of the method.

The Tautz patent teaches the use of a mixture of primers with the ability to select particular sequences of DNA (known as "short tandem repeats") that predictably vary between individuals, and thus can be reliably used to identify individuals. JA 119–121; Pet. App. 2a–3a, 7a.

Life Technologies "manufactures one component of its kits in the United States, the *Taq* polymerase, which it ships overseas to a LifeTech manufacturing facility in the United Kingdom." Pet. App. 8a. The *Taq* polymerase is a standard enzyme that has long been widely used in a variety of applications that require copying DNA sequences. JA 120 (Tautz patent issued in 1998); see, *e.g.*, Kary B. Mullis, *The Unusual Origin of the Polymerase Chain Reaction*, 262 Sci. Am. 56, 65 (Apr. 1990) (describing the common use of *Taq* polymerase in DNA amplification, and how the "polymerase is now produced conveniently by genetically engineered bacteria"); JA 159 (*Taq* polymerase is "widely used in research, in sequencing, in gene expression"). Thus, it is undisputed that *Taq* polymerase is a commodity component with many non-infringing uses, and is not especially made or especially adapted for use in the invention at issue. Pet. App. 30a n.14.

Other components for the foreign-sold kits, including the control DNA and the reaction mix, are manufactured in the United Kingdom. JA 158. Some of those other U.K.-made components use supplies sourced from the U.S. For instance, one of the patent's components is "at least one vessel containing a mixture of primers constituting between 1 and 50 of said primer pairs." JA 127 (col. 16: ll. 45–46). The primer mix component used in the foreign-made Life

Technologies kits "in many cases requires 30-plus primers." JA 157–158. Some of those primers are made in the United States, while many of them are manufactured in the United Kingdom. JA 154–159. Moreover, the process of creating the primer mix component used in the kits from raw primers is highly "complex and important . . . to make sure the kits work accurately." JA 158. Manufacturing the primer-mix and other components and creating the finished kits is a "very specialized" process, requiring a "dedicated facility" that must be maintained in a hyper-sterilized state "in order to reduce the risk of contamination," which would render the DNA tests unreliable. JA 157. The manufacture of Life Technologies' primer-mix component, like the manufacture of the finished, foreign-sold product, occurs in the United Kingdom facility.

Life Technologies had a license from Promega to use the patented technology for certain applications. Pet. App. 9a & n.3. Promega sued Life Technologies in 2010, alleging that it had infringed the patent by selling its kits into unlicensed fields. *Id.* at 9a. Promega "took an 'all or nothing' approach at trial," seeking to capture damages for all *worldwide* sales of Life Technologies' accused products, based only on United States patents. JA 173–174. Accordingly, Promega "relied on the assumption that *all* of the accused products defendants sold during the relevant time frame . . . were made in the United States, imported into the United States or made with a substantial portion of components from the United States, as required by § 271(a) and (f)(1)." Pet. App. 45a. The jury returned a verdict for Promega, found that Life Technologies' infringement was willful, and awarded damages for "all of LifeTech's worldwide sales." *Id.* at 11a.

Life Technologies moved for judgment as a matter of law, on the ground that Promega had failed to present sufficient evidence to sustain a jury verdict under § 271(f)(1), the only provision that could reach Life Technologies' worldwide sales of kits manufactured abroad. Pet. App. 51a–63a. The district court granted the motion, ruling that Life Technologies had not infringed under § 271(f)(1) because Promega's evidence "showed at most that *one* component of all the accused products, [the *Taq*] polymerase, was supplied from the United States." *Id.* at 51a.

The district court held that § 271(f)(1)'s requirement that "all or a substantial portion" of the components be supplied from the United States does not embrace the supply of a single component. Pet. App. 54a–57a. Section 271(f)(1), the court ruled, could not plausibly be interpreted to reach a single component "when viewed in conjunction with . . . § 271(f)(2)," which "extends to 'any component' of the invention" supplied from the U.S., but requires that the component be "especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use." Pet. App. 54a–55a. The court further observed that this Court's decision in *Microsoft* supported its ruling for two reasons. First, *Microsoft* stated that § 271(f)(1) and (f)(2) "'differ, among other things, on the quantity of components that must be supplied.'" *Id.* at 55a–56a (quoting *Microsoft*, 550 U.S. at 454 n.16). Second, this Court "concluded that it was improper to use policy concerns about 'loopholes' to justify broad interpretations of the patent statute," particularly given "the presumption that 'our patent law operates only domestically and does not extend to foreign

activities.'" *Id.* at 56a (quoting *Microsoft*, 550 U.S. at 455). Because Promega "failed as a matter of law to prove that all of the accused products . . . included a 'substantial portion' of components from the United States," the district court granted judgment as a matter of law to Life Technologies. *Id.* at 58a.[2]

The Federal Circuit reversed. As relevant here, the court "disagree[ed] with the district court's reading of § 271(f)(1)." Pet. App. 23a. The Federal Circuit held that "a party may be liable under § 271(f)(1) for supplying or causing to be supplied a single component for combination outside the United States." *Id.* at 28a. The court concluded that the relevant "dictionary definition of 'substantial' is 'important' or 'essential,'" and thus "the ordinary meaning of 'substantial portion' suggests that a single important or essential component can be a 'substantial portion of the components' of a patented invention." *Id.* at 28a–29a.

The court further reasoned that "the use of 'component' in § 271(f)(2) does not control the meaning of 'components' in § 271(f)(1)" because "these two subsections employ the terms in different contexts"; § 271(f)(2) focuses on whether a component is "especially made or especially adapted" for infringing use, while § 271(f)(1) focuses on whether components are "substantial." Pet. App. 30a. The Federal Circuit disregarded *Microsoft*'s contrary statement as dicta, concluding that "[i]n the absence

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[2] The district court stated that Promega "adduced evidence that *some* of the accused products include two components from the United States," but even if so, that did not matter. Pet. App. 51a. Any such evidence could not support the judgment because Promega "did not attempt to quantify the sales of those accused products," instead choosing to "adduce evidence only as to defendants' *total* worldwide sales." *Id.* at 52a.

of express guidance by the Supreme Court, we will not contravene the ordinary reading of the statute and categorically exclude the 'supply' of a single component of a patented invention from the scope of § 271(f)(1)." *Id.* at 33a. Finally, the court ruled that *Taq* polymerase is a "substantial portion of the components of a patented invention," even though it is only one commodity component out of the five in the kit claimed by the patent, because "[w]ithout *Taq* polymerase, the genetic testing kit recited in the Tautz patent would be inoperable." *Id.* at 34a.[3]

SUMMARY OF THE ARGUMENT

This Court should reject the Federal Circuit's interpretation of "all or a substantial portion of the components," as allowing liability based on any individual U.S.-sourced component that is "important" or "essential" to the operation of the U.S.-patented device. That interpretation is contrary to the text and structure of the statute, the presumption against extraterritoriality, and the statutory purposes. All of the tools of statutory construction support the view that "all or a substantial portion of the components" means "all or a large percentage closely approximating all of the components." In the case at hand, one of five components, *Taq* polymerase, of Life Technologies' kits is far less than a "substantial portion of the components" and, therefore, this Court should reverse the Federal Circuit's interpretation.

First, the plain text of the statute supports giving the phrase "all or a substantial portion of the compo-

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[3] Chief Judge Prost dissented but did not reach the issue under review because she would have found that Life Technologies was "not liable under § 271(f)(1) for active inducement." Pet. App. 39a n.1.

nents" a quantitative meaning, referring to the number of components supplied, not their subjective importance. The phrase "substantial portion" should be read in light of its proximity to the necessarily quantitative term "all." A textual reading with quantitative meaning gains even more strength from comparing § 271(f)(1) with its companion provision. In § 271(f)(2), Congress expressly addressed when a single U.S.-sourced component may be the basis of patent infringement arising from foreign sales. Congress required such a single U.S.-sourced component to be especially made or adapted for infringement; liability cannot be based on a single, commodity component. Section 271(f)(2) demonstrates that Congress did not intend to create liability for the supply of a single commodity component, even if it is important to the operation of the claimed invention. As the United States recognizes, the most natural reading of "all or a substantial portion" is all or "a high percentage (*i.e.*, nearly all) of the components." U.S. Br. 20.

Second, the Federal Circuit's interpretation cannot be squared with the presumption against extraterritoriality. In *Microsoft* v. *AT&T*, this Court instructed other courts to "resist giving . . . § 271(f) an expansive interpretation," applying the presumption that United States patent law "governs domestically but does not rule the world." 550 U.S. at 442, 454. The Federal Circuit's interpretation, which stretches the statute far beyond its text to close what it perceived as "loopholes" in the extraterritorial reach of U.S. patent law, disregards this instruction. It also risks undermining the primacy and efficacy of foreign patent and other laws within their sovereign territories. And by making worldwide liability for infringement of U.S. patents hinge on the decision of a foreign manufacturer to source a commodity from the United

States, it also reflects a policy judgment about the degree to which U.S. patent law should control the flow of goods through foreign countries. Such decisions belong to the political branches, because they concern sensitive questions of foreign trading relations and risk retaliation by foreign governments. A reading that limits liability to cases involving all or a large percentage closely approximating all both respects the strong anti-extraterritoriality principle this Court has recognized, and leaves policy judgments about broadening the reach of patent law to the political branches.

Finally, the Federal Circuit's interpretation is contrary to the statute's purposes. Section 271 was a response to this Court's decision in *Deepsouth*, and was intended to prevent manufacturers from circumventing U.S. patents by supplying from the United States in disassembled parts all or virtually all of the components of an invention, leaving only the trivial step of assembly to be performed abroad. The Federal Circuit's interpretation, which allows for worldwide liability based on the U.S. supply of a single commodity component, goes well beyond that purpose and imposes liability for conduct that is far removed from domestic infringement. Further, while Congress intended § 271(f) to promote U.S. manufacturing, the Federal Circuit's overbroad interpretation would have exactly the opposite effect, forcing domestic manufacturers of commodity supplies to either forego selling components to foreign assemblers or to relocate offshore to mitigate or avoid U.S. liability. Either choice puts them at an economic disadvantage to their foreign competitors.

I. THE FEDERAL CIRCUIT'S INTERPRETATION OF SECTION 271(f)(1) IS CONTRARY TO THE STATUTORY TEXT AND STRUCTURE.

A. The Plain Text Of Section 271(f)(1) Demonstrates That "All Or A Substantial Portion" Has A Quantitative Meaning.

Textually, the Federal Circuit's expansive interpretation of § 271(f)(1) does not withstand scrutiny. This subsection provides that the defendant must have supplied "all or a substantial portion of the components of a patented invention" from the U.S. The Federal Circuit read this to mean that liability for foreign sales is triggered when the defendant has supplied *any individual component* of the invention without which the claimed invention would be inoperable. Pet. App. 28a–35a. The majority defined "substantial" in qualitative terms; according to the court, it means "important" or "essential." *Id.* at 28a (citing, *e.g.*, *Webster's Third New Int'l Dictionary* 2280 (2002); *XVII Oxford English Dictionary* 67 (2d ed. 1989) ("essential; material")). Accordingly, the Federal Circuit concluded that "the ordinary meaning of 'substantial portion' suggests that a single important or essential component can be a 'substantial portion of the components.'" *Id.* at 28a–29a. And, the court then held, an essential component is nothing more than a component without which the invention "would be inoperable." *Id.* at 34a.

This holding does violence to the plain text of § 271(f)(1). First, the interpretation is so broad as to render the "substantial portion" limitation all but meaningless. The phrase "substantial portion" modifies "components of a patented invention." 35 U.S.C.

§ 271(f)(1). A component of a patented invention will rarely, if ever, be unnecessary to the functioning of that invention. Indeed, if the patent-embodying product could operate effectively without the component, it is questionable whether the supposed "component" would be a part of the "patented invention" at all. Here, for instance, the patented genetic testing kit would not be able to test DNA samples reliably if any one of its five components were removed. See 6-7, *supra*. By reading "substantial portion of the components" of an invention to mean "any individual component necessary to the operation of the invention," the Federal Circuit has made virtually *every* component of a patented invention, by itself, a "substantial portion of the components" of that invention. If that were the purpose of the language, then Congress would have simply written "any component of a patented invention," rather than choosing "substantial portion" that so clearly denotes a narrower meaning.

The way to make sense of the phrase "substantial portion" in this context is to read the word "substantial" in a quantitative sense, not in a qualitative sense. While the word "substantial" can mean "important," it is also commonly used to mean "large" or "ample" in quantity. See, *e.g.*, *The Random House College Dictionary* 1310 (1982) ("of ample or considerable amount, quantity, size, etc."); *Webster's New Twentieth Century Dictionary* 1817 (2d ed. 1981) ("of considerable size or amount; large"); 2 *Compact Edition of the Oxford English Dictionary* 3129 (1980) ("[o]f ample or considerable amount, quantity, or dimensions"); *Webster's Third New International*

Dictionary 2280 (1981) ("abundant; plentiful" (capitalization omitted)).

That is clearly the way § 271(f)(1) uses the word. The term "substantial portion" follows the quantitative term "all," in the phrase "all or a substantial portion of the components." 35 U.S.C. § 271(f)(1). As the United States explains, this phrasing "makes clear that the provision uses the term 'substantial' in its quantitative sense," to refer to the *number* of components exported, rather than their qualitative importance. U.S. Br. 16. "[A] word is known by the company it keeps," *Yates* v. *United States*, 135 S. Ct. 1074, 1085 (2015) (plurality), and the surrounding words in § 271(f)(1), including "all" and "portion," are plainly quantitative in nature. See U.S. Br. 16–17. When paired with a plural noun such as "components," the word "all" has the quantitative meaning "[t]he entire or total number, amount, or quantity of." *The American Heritage Dictionary of the English Language* 33 (1978); see *Webster's Third New International Dictionary* 54 ("the whole number or sum of"); 1 *Compact Edition of the Oxford English Dictionary* 57 (1980) ("[t]he entire number of; the individual components of, without exception"). The term "portion" is also quantitative, referring to "[a] section or quantity within a larger thing; a part of a whole." *Webster's New Dictionary and Roget's Thesaurus* 550 (1984); *Webster's Third New International Dictionary* 1768 ("a part of a whole"); 2 *Compact Edition of the Oxford English Dictionary* 2245 ("[a] part of any whole").

Thus, when used in the phrase "all or a substantial portion," the term "substantial" naturally refers to quantity, not a part that is qualitatively "important." Taken as a whole, the phrase refers to all components

of an invention or a quantitatively large percentage of the components. Further, as the United States explains, the conjunction of "all" with a "substantial portion" suggests that a portion is "substantial" only when it constitutes "a high percentage (*i.e.*, nearly all) of the components." U.S. Br 20; *United States* v. *Williams*, 553 U.S. 285, 294 (2008) ("a word is given more precise content by the neighboring words with which it is associated").

The use of the same phrasing in other federal statutes similarly demonstrates that "all or a substantial portion" has a quantitative meaning. For example, the Hydroelectric Power Development Act states that the "total non-Federal obligation shall be paid . . . [when] the project concerned will be available for actual generation of *all or a substantial portion* of the authorized hydroelectric power of the project." 42 U.S.C. § 1962d-14a(g)(1) (emphasis added). While no court has interpreted the phrase, it is clear that the statute is referring to the quantity of hydroelectric power, not its importance. Other statutes similarly use the phrase in quantitative terms. 37 U.S.C. § 419 (Pay and Allowance of the Uniformed Services) (officer "may be paid a civilian clothing allowance . . . if such officer is required to wear civilian clothing *all or a substantial portion* of the time in the performance of the officer's official duties") (emphasis added); 26 U.S.C. § 4252 ("the term 'toll telephone service' means . . . a service which entitles the subscriber . . . to the privilege of an unlimited number of telephonic communications to or from *all or a substantial portion* of the persons having telephone or radio telephone stations in a specified area") (emphasis added).

The Federal Circuit therefore erred in construing "substantial" to mean "'important' or 'essential,'" and

ruling that it encompassed "a single important or essential component." Pet. App. 28a–29a.

B. The Statutory Structure Confirms That Section 271(f)(1) Does Not Encompass The Supply Of A Single Commodity Component.

The errors in the Federal Circuit's interpretation become particularly clear when the structure of the statute is considered. See *K Mart Corp.* v. *Cartier, Inc.*, 486 U.S. 281, 291 (1988) ("In ascertaining the plain meaning of the statute, the court must look to the particular statutory language at issue, as well as the language and design of the statute as a whole"). As the United States explains, § 271(f)(2) expressly "specifies the circumstances in which the export of a single component from the United States can give rise to infringement liability," U.S. Br. 17: liability can be imposed for such conduct *only* if the component is "especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use"—a limitation that is conspicuously absent from § 271(f)(1). 35 U.S.C. § 271(f)(2); see *id.* § 271(c) (similarly limiting liability for contributory infringement to a component that is "not a staple article or commodity of commerce suitable for substantial noninfringing use"). The fact that Congress used the phrase "any component" in § 271(f)(2), and then limited liability to the provision of a specialized component, is a powerful, if not overwhelming, reason to reject the Federal Circuit's re-writing of § 271(f)(1) as if it, too, used the phrase "any component."

Section 271(f)(1) also consistently refers to "components" in the plural, for instance providing for liability "where *such components are uncombined* in

whole or in part," and are supplied to "induce the combination of *such components*." *Id.* § 271(f)(1) (emphases added). In marked contrast, § 271(f)(2) consistently refers to "component" in the singular. For instance, § 271(f)(2) provides for liability "where *such component is uncombined* in whole or in part" and is supplied "intending that *such component* will be combined." *Id.* § 271(f)(2) (emphases added). These differences in the language of the two subsections that were enacted at the same time demonstrate that Congress did not intend § 271(f)(1) to include the supply of a single component. See 1 U.S.C. § 1 (plural terms include the singular "*unless the context indicates otherwise*") (emphasis added); *United States* v. *Hayes*, 555 U.S. 415, 422 n.5 (2009) (same).

The Federal Circuit concluded that the phrase "where such components are uncombined" in § 271(f)(1) does not mean that multiple components must be supplied from the United States because it "refer[s] to 'the components of a patented invention,' not to what must be 'supplied' by the alleged infringer." Pet. App. 29a. But § 271(f)(2) "employs the same phrasing" while using the singular. *Id.* at 55a. The singular phrase "where such component is uncombined" must refer to the component supplied from the United States, not to all components of the invention, because a single-component invention could never be "uncombined." *Id.* Likewise, the phrase "such components" in § 271(f)(1) refers back to the previously referenced "components" which are "supplied in or from the United States." See A. Scalia & B. Garner, *Reading Law: the Interpretation of Legal Texts* 144-46 (2012) (a "demonstrative adjective generally refers to

the nearest reasonable antecedent"; "such" is a "demonstrative adjective").[4]

These differences in the language of § 271(f)(1) and (f)(2) are all the more revealing because the two subsections were drafted together, and added to the Patent Act as part of the same bill. 130 Cong. Rec. H10522 (daily ed. Oct. 1, 1984). Under these circumstances, the "differing language in the two subsections" should not be "ascribe[d] . . . to a simple mistake in draftsmanship" and given "the same meaning in each." *Russello* v. *United States*, 464 U.S. 16, 23 (1983). To the contrary, when § 271(f)(1) and (f)(2) are read side by side, it is clear that Congress chose not to expose domestic suppliers of a single component to liability for foreign sales, so long as that component is a "staple article or commodity of commerce" with a "substantial noninfringing use." 35

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[4] The Federal Circuit rejected this interpretation because it concluded that § 271(f)(1)'s reference to "the combination of such components outside the United States in a manner that would infringe the patent" showed that the phrase "such components" must include all the components of the invention. Pet. App. 29a. Again, the phrasing of § 271(f)(2)—which refers to "such component" in the singular being "combined outside of the United States in a manner that would infringe the patent"—demonstrates the fallacy of this interpretation. The phrase clearly refers to the "combination" of "such components" supplied from the U.S. with any other components of the invention supplied abroad, to form the entirety of the invention. The requirement that components be combined outside the U.S. thus serves to draw the line between § 271(f) and § 271(a): if the components supplied from the United States are uncombined with the remainder of the invention at least in part, then § 271(f) controls. On the other hand, if all of the components of a patented invention are combined in the United States, the question becomes whether the defendant "makes . . . any patented invention, within the United States" within the meaning of § 271(a).

U.S.C. § 271(f)(2). The Federal Circuit's construction of section 271(f)(1) to nonetheless "permit liability based on the supply of a single staple article would give that provision the broad sweep that Congress purposely avoided in Section 271(f)(2)." U.S. Br. 18.

The Federal Circuit reasoned that the language of § 271(f)(2) should not inform its interpretation of § 271(f)(1) because "these two subsections employ the terms in different contexts." Pet. App. 30a. "The focus of the infringement inquiry under § 271(f)(1) is whether one or more components supplied by a party constitutes 'all or a substantial portion of the components of a patented invention . . . .'" *Id.* By contrast, according to the Federal Circuit, "the focus of the infringement inquiry under § 271(f)(2) is whether a party has supplied any component 'especially made or especially adapted for use in [a patented] invention'" that is not a "staple article or commodity of commerce suitable for substantial noninfringing use." *Id.*

The fact that the two provisions concern different, but related, situations strengthens the view that "substantial" should not be read in a qualitative sense in (f)(1), and should not be interpreted to apply when only a single component is supplied from the U.S. Nobody denies that (f)(2) specifically addresses how to deal with a product that includes a single component supplied from the U.S., and nobody denies that it requires a qualitative analysis of that single component. Liability can be found only if that component is "especially made or especially adapted for use" in an invention. The fact that (f)(1) is different means that it should not be read as virtually synonymous with (f)(2). Any component specially made or adapted for use in an infringing product covered by

(f)(2) would qualify as an "important" individual component under the Federal Circuit's interpretation of (f)(1). See 15–16, *supra*. The Federal Circuit's reading thus trivializes (f)(2). Giving (f)(1) a quantitative reading preserves the different but related roles that Congress intended the two provisions to play.

This Court's prior encounter with § 271(f) also confirms that a quantitative reading of (f)(1) is the most natural reading. In *Microsoft*, this Court expressly noted that § 271(f)(1) and (f)(2) "differ, among other things, on the quantity of components that must be 'supplie[d] . . . from the United States' for liability to attach." 550 U.S. at 454 n.16 (alterations in original). In the same vein, this Court noted that "§ 271(f)(1) applies to the supply abroad of 'all or a substantial portion of' a patented invention's components," while "§ 271(f)(2) applies to the export of *even a single component* if it is 'especially made or especially adapted for use in the invention and not a staple article or commodity of commerce suitable for substantial noninfringing use.'" *Id.* at 458 n.18 (emphasis added). To be sure, those statements were not essential to the Court's holding. But they powerfully reflect the most natural way to read these two related subsections.

The Federal Circuit concluded that this interpretation was "undermined by the very facts of *Microsoft*," because there the "alleged infringing activity under § 271(f) was a party's export of a single component of this two-component invention," but *Microsoft* did not resolve the case by holding "that liability under § 271(f)(1) requires the export of more than one component." Pet. App. 32a–33a (emphasis omitted). The parties in *Microsoft* did not argue that only a single component was involved, and the Court did not

consider the issue; instead, it held that the software in question was not a "component" at all (a logically antecedent question to *how many* components are involved). The question presented in that case accordingly did not "turn on whether [the Court] view[ed] the case under paragraph (1) or (2)." *Microsoft*, 550 U.S. at 454 n.16. As a result, nothing in the disposition of *Microsoft* undermines the quantitative reading of (f)(1) that *Microsoft* itself recited.

Because the Federal Circuit's interpretation does not comport with the text or the structure of the statute, this Court should reject it and hold that the phrase "all or a substantial portion of the components" in § 271(f)(1) refers to a quantitatively large portion approaching all of the components of the invention.

II. THE FEDERAL CIRCUIT'S INTERPRETATION OF SECTION 271(f)(1) IS CONTRARY TO THE PRESUMPTION AGAINST EXTRATERRITORIALITY.

This Court has explained that, because "§ 271(f) is an exception to the general rule that our patent law does not apply extraterritorially," courts should "resist giving the language in which Congress cast § 271(f) an expansive interpretation." *Microsoft*, 550 U.S. at 442. The presumption against extraterritoriality is overcome only if "'there is the affirmative intention of the Congress clearly expressed' to give a statute extraterritorial effect," and where a statute provides "for some extraterritorial application, the presumption against extraterritoriality operates to limit that provision to its terms." *Morrison* v. *Nat'l Austl. Bank Ltd.*, 561 U.S. 247, 255, 265 (2010).

This "presumption that United States law governs domestically but does not rule the world applies with particular force in patent law." *Microsoft*, 550 U.S. at 454–55; see *Brown* v. *Duchesne*, 60 U.S. (19 How.) 183, 195 (1856) (Patent law "is domestic in its character, and necessarily confined within the limits of the United States. It confers no power on Congress to regulate commerce, or the vehicles of commerce, which belong to a foreign nation . . . ."); J. Erstling & F. Struve, *A Framework for Patent Exhaustion from Foreign Sales*, 25 Fordham Intell. Prop. Media & Ent. L.J. 499, 508–12 (2015). The "traditional understanding that our patent law operates only domestically and does not extend to foreign activities is embedded in the Patent Act itself, which provides that a patent confers exclusive rights in an invention within the United States." *Microsoft*, 550 U.S. at 455 (citations and alterations omitted) (citing 35 U.S.C. § 154(a)(1)). The text of the Patent Act is expressly territorial: it confers exclusive rights "throughout the United States," bars importation "into the United States," and establishes liability for infringement "within the United States." 35 U.S.C. §§ 154(a)(1), 271(a).

The territorial nature of United States patent law also reflects international obligations, dating back to the 1883 Paris Convention, which provide that the legal force of a patent issued in one country is limited to that country.[5] In short, the United States does not

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[5] Paris Convention for the Protection of Industrial Property art. 4*bis*, Mar. 20, 1883 ("Independence of Patents Obtained for the Same Invention in Different Countries: (1) Patents applied for in the various countries of the Union . . . shall be independent of patents obtained for the same invention in other countries . . . ."); *Voda* v. *Cordis Corp.*, 476 F.3d 887, 898–99 (Fed.

exercise patent control over foreign markets, and it "correspondingly reject[s] the claims of others to such control over our markets." *Microsoft*, 550 U.S. at 455 (quoting *Deepsouth*, 406 U.S. at 531). The remedy for infringement that occurs abroad lies in "obtaining and enforcing foreign patents," *id.* at 456, not in interpreting United States patent law to "rule the world," *id.* at 454.

While § 271(f) extends U.S. patent law into foreign markets in a very limited way, it does not otherwise alter the fundamental principle that U.S. patent law "does not, and was not intended to, operate beyond the limits of the United States." *Id.* at 455 (alterations omitted) (quoting *Deepsouth*, 406 U.S. at 531). Therefore, as this Court has emphasized, the market exclusivity bestowed by a patent should not be expanded extraterritorially based on "mere inference from ambiguous statutory language." *Deepsouth*, 406 U.S. at 531. "Any doubt" that particular "conduct falls outside § 271(f)'s compass would be resolved by the presumption against extraterritoriality." *Microsoft*, 550 U.S. at 454. The Federal Circuit's expansive interpretation of § 271(f)(1) is flatly inconsistent with this presumption and with this Court's holding in *Microsoft*. See Sean Fernandes, Microsoft Corp. v. AT&T: *A Welcome Return to Patent Law's Tradition of Territoriality*, 23 Berkeley Tech. L.J. 75, 105 (2008).

The Federal Circuit suggested that the presumption is inapplicable because "Congress' chosen language assigns liability to LifeTech's conduct within the United States, based on its extraterritorial

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Cir. 2007) (the Paris Convention "clearly expresses the independence of each country's sovereign patent systems and their systems for adjudicating those patents.").

effect." Pet. App. 27a n.10. But *Microsoft* rejected the argument that "the presumption holds no sway here given that § 271(f), by its terms, applies only to domestic conduct, *i.e.*, to the supply of a patented invention's components 'from the United States.'" 550 U.S. at 456. To the contrary, the Court held that the presumption "tugs strongly against" a broad construction of § 271(f), and that a "dynamic judicial interpretation" of the provision is impermissible. *Id.* at 455, 457.

The notion that the presumption does not apply here is particularly weak because the question in this case asks *how much* domestic conduct is necessary to trigger the prospect of U.S. patent liability when a significant quantum of foreign conduct is also occurring. There is no doubt that Promega's patent claim involves U.S. patent law regulation of foreign conduct. Life Technologies combined its kits' components "*outside the United States* in a manner that would infringe the patent if such combination occurred within the United States." 35 U.S.C. § 271(f)(1) (emphasis added). And the Federal Circuit held that Life Technologies was liable for infringing the U.S. patent through foreign sales of kits, where it supplied all but one of the kits' components from sources outside of the United States. The fact that the polymerase component was supplied from the U.S. does not render the presumption inapplicable. It raises the question whether the presumption (in conjunction with the language, structure and purpose of the statute) requires *more* domestic conduct than manufacturing and selling a single component to justify U.S. patent law's application to foreign conduct. As this Court has held, "it is a rare case of prohibited extraterritorial application that lacks *all* contact with

the territory of the United States," and "the presumption against extraterritorial application would be a craven watchdog indeed if it retreated to its kennel whenever *some* domestic activity is involved in the case." *Morrison*, 561 U.S. at 266; see *Kiobel* v. *Royal Dutch Petroleum Co.*, 133 S. Ct. 1659, 1669 (2013) ("even where the claims touch and concern the territory of the United States, they must do so with sufficient force to displace the presumption against extraterritorial application").

The Federal Circuit's interpretation of § 271(f)(1) vastly expands the extraterritorial reach of the statute. According to the Federal Circuit, § 271(f)(1) can apply even when the amount of domestic conduct at issue is trivial in comparison to the amount of foreign conduct involved. If the Federal Circuit's interpretation is sustained, the supply from the U.S. of *any* single component that is deemed "important" places under the control of U.S. patent law all goods that are manufactured abroad with all other components supplied abroad and that are sold abroad. And a component is "important" if the claimed invention "would be inoperable" without it. Pet. App. 34a. This standard is breathtakingly broad. A typical car engine cannot function without a spark plug or a battery. On the Federal Circuit's view, these stock "components" are "important" or "essential" to an invention that claims an engine with a stock spark plug or battery and an entirely separate new feature. See U.S. Br. 19. Likewise, the *Taq* polymerase at issue here is a stock component that has been commonly used for decades to copy DNA; its function in the kit is in no way innovative or specialized to the invention. See 8, *supra*. Under the Federal Circuit's standard, the supply of nearly any component from the U.S. could trig-

ger extraterritorial liability, because an invention is nothing more than the sum of the parts that make the invention work.

The point of the presumption against extraterritorial application of U.S. patent law is to prevent U.S. law from intruding on the decisions of foreign governments regarding their consumers' access to useful products. Indeed, this case illustrates the magnitude of the risks at stake—Promega was awarded $52 million in lost profits on worldwide kit sales, based on evidence that Life Technologies supplied just a single commodity component from the U.S. That ruling will inhibit the access of foreign markets to Life Technologies' kits, or, at a minimum, dramatically increase the cost of such access. Such liability would have been avoidable by simply obtaining polymerase from outside the U.S., giving companies in similar circumstances a strong incentive not to use U.S.-manufactured components. In addition, the Federal Circuit's ruling effectively allows Promega to use U.S. law as a mechanism to extend its long-expired U.K. patent; Promega's U.K. patent expired in 2009. Process for Analyzing Length Polymorphisms in DNA Domains, EP 0 438 512 (B1) (filed Oct. 11, 1989) (expired Oct. 10, 2009), https://worldwide.espacenet.com/publicationDetails/inpadoc;jsessionid=3NpcWL04hVdYiUhJQc74CtXL.espacenet_levelx_prod_3?CC=EP&NR=0438512B1&KC=B1&FT=D&ND=&date=19971229&DB=&locale=.

As the United States recognizes, the decision below thus creates precisely the situation that the presumption against extraterritoriality is designed to guard against: liability for "conduct that plays a relatively minor role in the transaction, in derogation of foreign states' legitimate sovereign interest in permitting

their citizens to use imported staple articles to assemble and sell inventions that are not patented abroad." U.S. Br. 19.

This extraterritorial expansion of U.S. patent law "would undermine the international system of national patents and lead to a type of U.S. patent imperialism." Bernard Chao, *Patent Imperialism*, 109 Nw. U. L. Rev. Online 77, 86 (2014). It risks "creat[ing] friction between States that, after having made deliberate policy choices in the best interest of their citizens, offer differing degrees of patent protections." Jacob A. Schroeder, *So Long As You Live Under My Roof, You'll Live By . . . Whose Rules?: Ending the Extraterritorial Application of Patent Law*, 18 Tex. Intell. Prop. L.J. 55, 81 (2009). Companies concerned about the manufacture and sale of products abroad could choose to sue for patent infringement in the U.S., "even if the other country has refused to award a patent for a particular invention and has consciously chosen to provide more modest recoveries to those that are awarded patents there." Chao, *supra*, at 87. Allowing companies to bypass foreign patent law by using a U.S. court to enforce U.S. patent liability for foreign manufacturing and world-wide sales thus risks undermining the primacy and effectiveness of foreign patent laws within their sovereign territories.

Inattention to the presumption against extraterritoriality also creates conflicts between U.S. law and the differing policy judgments reflected in the laws of foreign sovereigns, regarding how to balance innovation, competition, and access to beneficial goods. For instance, the Court of Justice of the European Union has consistently held that "the exercise of an exclusive right linked to an intellectual-property right by

the proprietor may, in exceptional circumstances, involve abusive conduct" under E.U. antitrust law. Case C-170/13, *Huawei Techs. Co.* v. *ZTE Corp.*, ¶ 47, http://curia.europa.eu (July 16, 2015); see Margrethe Vestager, Commissioner, 19th IBA Competition Conference, Intellectual Property and Competition (Sept. 11, 2015), https://ec.europa.eu/commission/2014-2019/vestager/announcements/intellectual-property-and-competition_en ("[I]ntellectual property rights can be used to restrict competition . . . . [and] harm consumers, who should have access to a wide range of innovative and creative goods and services at reasonable prices. Competition law can therefore complement intellectual property law in situations where the way that intellectual property law is exercised may fall short of promoting consumer welfare."). The Federal Circuit's broad interpretation of § 271(f)(1) thus creates the potential for conflicting court judgments between U.S. and foreign courts. For example, a U.S. court judgment enforcing U.S. patent liability for a product manufactured in the E.U. could lead to an E.U. court judgment that the maintenance of the U.S. suit violated E.U. antitrust law. See generally Case AT.39985, *Motorola* ¶ 1, http://ec.europa.eu (Apr. 29, 2014) (holding that Motorola violated E.U. antitrust law "by seeking and enforcing an injunction against Apple"), *id.* ¶ 514.

The Federal Circuit's expansive extraterritorial interpretation could also lead to tensions and trade conflicts with foreign sovereigns. "Clearly, the United States would be extremely upset if the circumstances were reversed and another country tried to impose its patent values on products made and sold in the U.S." Chao, *supra*, at 87. Other countries will likely be no more pleased about the extraterritorial expansion of

U.S. patent law, and may even retaliate by seeking to impose infringement liability for U.S. conduct that is perfectly lawful in the U.S. It is not hard to imagine a trading competitor with major manufacturing capabilities retaliating if it perceived U.S. patent law intruding on its preferences for the free flow of goods through its markets. Many goods manufactured and sold in the U.S. source at least some of their components abroad. The U.S. would not welcome a ruling from a foreign country that sales *in the United States* of a product that has no U.S. patent protection, but was made with a single component sourced from that country, must be priced to account for foreign patent damages. Due to the serious risk of international friction from the extraterritorial expansion of U.S. patent law, courts should not lightly infer that Congress intended such an outcome. And here, there is no "affirmative intention of the Congress clearly expressed" to give the statute such a broad extraterritorial reach. *Morrison*, 561 U.S. at 255.

The alternative interpretation Life Technologies proposes respects the presumption against extraterritoriality and minimizes the risk of trade and international legal conflicts. As discussed above, the text and structure of the statute indicate that Congress chose to require that all or a large percentage closely approximating all of the components of an invention must be sourced from the United States before liability under § 271(f)(1) may apply. That reading inverts the proportion of U.S. and foreign conduct the statute regulates compared to the Federal Circuit's view. Whereas the Federal Circuit requires only an *in*substantial amount of domestic conduct to trigger regulation of a substantial amount of foreign conduct, Life Technologies proposes a standard that requires a

substantial amount of domestic conduct to trigger regulation of an *in*substantial amount of foreign conduct.

If Congress wishes to take a more dramatic step than it already has, that is its prerogative. The political branches are well suited to gauge the degree of intrusion into foreign markets necessary to protect against evasion of U.S. patent law while giving due respect to the sovereign interests of other nations. The presumption against extraterritoriality is rooted in the recognition that courts are ill-suited to make those sensitive judgments, and so "[a]ny doubt" as to the reach of § 271(f) should be resolved by applying "the presumption against extraterritoriality." *Microsoft*, 550 U.S. at 454. The political branches can go further if they wish, but our law should not be interpreted by courts to intrude so substantially on foreign sovereign interests without clear expression from Congress. *Morrison*, 561 U.S. at 255.

III. THE FEDERAL CIRCUIT'S INTERPRETATION OF SECTION 271(f)(1) IS CONTRARY TO THE PURPOSES OF THE STATUTE.

Finally, the Federal Circuit's interpretation of § 271(f)(1) should be rejected because it is contrary to the congressional purposes animating the statute. See *King* v. *Burwell*, 135 S. Ct. 2480, 2493 (2015) ("We cannot interpret federal statutes to negate their own stated purposes.") (quoting *New York State Dep't of Social Servs.* v. *Dublino*, 413 U.S. 405, 419-20 (1973)); *Medtronic, Inc.* v. *Lohr*, 518 U.S. 470, 485 (1996) (the Court's "interpretation of [statutory] language does not occur in a contextual vacuum" but rather "is guided" by "a fair understanding of congressional purpose") (emphasis omitted).

First, the Federal Circuit misinterpreted the relationship of § 271(f) to this Court's decision in *Deepsouth Packing Co.* v. *Laitram Corp.*, 406 U.S. 518 (1972). *Deepsouth* held that manufacturing all of the components of a patented invention in the U.S., and shipping them abroad to foreign customers for final assembly and sale, was not infringement. *Id.* at 523–24, 525–26. In *Microsoft*, this Court concluded that "[s]ection 271(f) was a direct response" to *Deepsouth*, and that "[h]aving attended to the gap made evident in *Deepsouth*, Congress did not address other arguable gaps," which "our precedent leads us to leave in Congress' court." 550 U.S. at 457–58; see S. Rep. No. 98-663, at 2–3 ("This provision is a response to the Supreme Court's 1972 *Deepsouth* decision which interpreted the patent law not to make it infringement where the final assembly and sale is abroad."); 129 Cong. Rec. E5777-79 (daily ed. Nov. 18, 1983) (statement of Rep. Kastenmeier) (similar).

Here, in stark contrast, the Federal Circuit concluded that Congress was motivated by broad "policy goals" of "prevent[ing] copiers from avoiding United States patents by supplying components" for assembly abroad, and that, "[t]o achieve these goals, Congress chose language for § 271(f)(1) broader than the particular facts of *Deepsouth*." Pet. App. 26a. To be sure, in *Deepsouth* all the components of the invention were sourced from the U.S., and the statute applies when "all or a substantial portion" of the components are supplied from the U.S. The statute is, in that sense, broader than the specific facts in *Deepsouth*. But this language does not show that Congress had expansive "policy goals" for § 271(f) beyond addressing the problem that *Deepsouth* identified.

In *Deepsouth*, all of the components of the invention "were manufactured in the United States by a competitor of the patent owner and shipped to Brazil in less than completely assembled form," and the customers' "[f]inal assembly in Brazil required less than one hour." S. Rep. No. 98-663, at 3. Congress was concerned that competitors could easily "circumvent a patent" by shipping all components out of the country, leaving only the trivial step of combining the components to be performed by their customers abroad. *Id.*; see *id.* (bill is intended to prevent "the subterfuge which is allowed under the *Deepsouth* interpretation of the patent law"); 129 Cong. Rec. S9005-06 (daily ed. June 23, 1983) (statement of Sen. Mathias) ("The bill also contains a provision to assure that a product patent cannot be circumvented by manufacturing the material components of the product within the United States, then assembling them and selling the finished product abroad."); 129 Cong. Rec. E5777-79 (similar).

Congress's inclusion of the supply of a "substantial portion" of components in § 271(f)(1) does not mean Congress intended to capture cases involving more than trivial amounts of foreign conduct. If Congress had drafted the provision to prohibit only the supply of *all* the components of a patented invention, the provision would not have fixed "the gap made evident in *Deepsouth*," *Microsoft*, 550 U.S. at 457–58: Manufacturers could still have easily "circumvent[ed]" the provision by supplying nearly all of the components of the patented invention, leaving their customers to procure the small remainder abroad. S. Rep. No. 98-663, at 3. But the situation at issue here—where a single commodity component is supplied from the United States, and the remainder of the highly com-

plex and specialized process of manufacturing and assembling the components is performed abroad—is altogether different from the evasion of domestic law by leaving a trivial amount of conduct to complete infringement overseas. See 8–9, *supra*. This case is plainly not the type of "circumvent[ion]" or "subterfuge" that Congress intended to prohibit. S. Rep. No. 98-663, at 3. Further, there is no indication whatsoever in the legislative history that Congress intended "all or a substantial portion" to have a qualitative meaning or to capture the supply of a single "important" commodity component. To the contrary, as the United States explains, Congress intended § 271(f)(1) to prohibit the supply of "a high percentage (*i.e.*, nearly all) of the components," which it considered "to be approximately as culpable as supplying 'all' of the components." U.S. Br. 20. In short, Congress intended § 271(f)(1) to apply when a manufacturer circumvents the patent by supplying all but an *insubstantial* or trivial portion of the components from the U.S.

In this respect, the purpose of § 271(f)(1) is similar to that of the doctrine of equivalents: preventing the "efforts of copyists to evade liability for infringement by making only insubstantial changes to a patented invention." *Festo Corp.* v. *Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 727 (2002); see *Graver Tank & Mfg. Co.* v. *Linde Air Prods. Co.*, 339 U.S. 605, 607–08 (1950) ("The essence of the doctrine [of equivalents] is that one may not practice a fraud on a patent" by making "insubstantial changes and substitutions in the patent which, though adding nothing, would be enough to take the copied matter outside . . . the reach of law"). Here, similarly, Congress intended to prevent manufacturers from evading patents by

performing nearly all of the steps of infringement in the United States, but skirting literal infringement by leaving an insubstantial portion of components to be supplied and assembled abroad. Congress did not intend to enact a sweeping extraterritorial expansion of patent law, under which the supply of nearly any commodity component could lead to liability.

Indeed, the Federal Circuit's extraordinarily broad interpretation of § 271(f)(1) will frustrate one of the major purposes of the provision—promoting and retaining U.S. manufacturing jobs. 130 Cong. Rec. at H10531 (the bill is intended to "stimulate the reindustrialization of America"); 129 Cong. Rec. E5777 (purposes of the bill include "the diminution of unemployment caused by foreign competition"); Ronald Wilson Reagan, Statement on Signing H.R. 6286 Into Law (Nov. 9, 1984) ("[The bill] also closes a loophole in existing law which permitted copiers to export jobs and avoid liability by arranging for final assembly of patented machines to occur offshore."); see also Patent Law Improvement Act: Hearing Before the Subcomm. on Patents, Copyrights, and Trademarks of the S. Comm. of the Judiciary, 98th Cong., 146-64, 180-97, 207-11 (1984) ("S. Hrg. 98-1008") (Statements of Mr. Schlicher, Mr. Maurer, and Mr. Engelberg in response to Sen. Mathias) (similar). Interpreting § 271(f)(1) narrowly, as Congress intended, serves this purpose by discouraging companies who manufacture all or nearly all of the components of an invention in the United States from moving the final manufacture of the invention itself offshore; that last step ceases to be the difference between infringement and non-infringement, and so there is nothing to gain by exporting that step.

But the vastly expanded interpretation that the Federal Circuit adopted would have precisely the opposite effect. Rather than promoting U.S. manufacturing, this sweeping interpretation gives domestic manufacturers of all manner of products strong incentives to relocate their operations offshore to avoid U.S. liability. The impact of the Federal Circuit's interpretation will be to "multiply the monetary and injunctive exposure of U.S. producers to claims of patent infringement," because any domestic supplier of a commodity product used in patented inventions will be at risk of worldwide patent infringement liability for its sales. James R. Farrand, *Territoriality and Incentives Under the Patent Laws: Overreaching Harms U.S. Economic and Technological Interests*, 21 Berkeley Tech. L.J. 1215, 1277 (2006). This would potentially include suits seeking injunctions that could disrupt the reliable flow of such commodity products to a foreign manufacturer, even where that country's law provides no basis for disrupting sales of the end product. This problem is particularly acute because the Federal Circuit interpreted "substantial" to mean nothing more than that the invention "would be inoperable" without the component at issue, Pet. App. 34a, which could cover "even minor constituent parts, like the spark plug of a car," or similar staple articles of commerce. U.S. Br. 19. The clear effect of this broad interpretation will be to "put U.S. producers at a disadvantage relative to their foreign competitors." Farrand, *supra*, at 1277.

And because the risks of § 271(f) "are easy to avoid by moving production offshore, they create strong incentives that operate directly contrary to U.S. interests." *Id.* at 1267. In other words, under the Federal Circuit's interpretation, patent law will create "one

more incentive for U.S. companies who compete in foreign markets to move their manufacturing facilities abroad." Donald S. Chisum, *Normative and Empirical Territoriality in Intellectual Property: Lessons from Patent Law*, 37 Va. J. Int'l L. 603, 607 (1997), by "treat[ing] U.S.-based companies worse than foreign companies" that manufacture the same components in foreign countries, Chao, *supra*, at 88. The Federal Circuit's interpretation will additionally harm U.S. manufacturers by discouraging foreign companies from purchasing components made in the U.S., since doing so could subject the foreign company to U.S. patent liability for worldwide sales of its product. The Federal Circuit's interpretation thus flies in the face of Congress's intent in enacting the provision, with, as the United States remarks, "far-reaching implications for U.S. export trade." U.S. Br. 19–20.

Further, the Federal Circuit's interpretation is also contrary to Congress's long-standing concern that patent law should not be used to restrict the free flow of staple articles of commerce. As this Court has recognized, infringement liability based on the supply of staple articles of commerce "necessarily" implicates "the public interest in access to that article of commerce," as well as "the rights of others freely to engage in substantially unrelated areas of commerce." *Sony Corp. of Am.* v. *Universal City Studios, Inc.*, 464 U.S. 417, 440–42 (1984); see *Henry* v. *A.B. Dick Co.*, 224 U.S. 1, 48 (1912) (patent infringement liability based on the supply of staple articles "would block the wheels of commerce"), *overruled on other grounds by Motion Picture Patents Co.* v. *Universal Film Mfg. Co.*, 243 U.S. 502, 517 (1917). For these reasons, Congress specifically eliminated contributory in-

fringement liability for the supply of components that are "a staple article or commodity of commerce suitable for substantial noninfringing use" in 35 U.S.C. § 271(c). See *Dawson Chem. Co.* v. *Rohm & Haas Co.*, 448 U.S. 176 (1980). And Congress built the same protection into § 271(f): section (f)(2) makes liability possible based on the supply of a single "component of a patented invention," but not if that component is "a staple article or commodity of commerce suitable for substantial noninfringing use." Section (f)(1) does not expressly exclude staple articles like (f)(2), but still protects the free flow of commerce by limiting liability to the supply of "all or a substantial portion of the components." 35 U.S.C. § 271(f); see also S. Hrg. 98-1008, at 26 (Statement of Gerald J. Mossinghoff, Asst. Secretary and Commissioner of Patents and Trademarks) (discussing the need to ensure that § 271(f) will not "deter the sale of components which are staple articles suitable for substantial noninfringing use"). The Federal Circuit's interpretation entirely erases this protection, allowing liability for the supply of a *single staple article of commerce*, such as the *Taq* polymerase at issue here. This interpretation is contrary to the Congressional intent reflected both in § 271(f) itself, and in over a hundred years of patent law. It should be rejected.

Finally, as discussed above, there is no indication—much less an "affirmative intention of the Congress clearly expressed," *Morrison*, 561 U.S. at 255—that Congress intended § 271(f)(1) to expand the extraterritorial application of patent law to anything more than the narrow set of circumstances where a U.S. manufacturer has attempted to evade a patent by supplying all or nearly all of the components of a patented invention for assembly abroad. If U.S. patent law is going to be used to restrict the flow of commod-

ity components, distort the incentives for companies to source components from the U.S., and create friction with foreign trading partners and conflicts with foreign laws, any such "alteration should be made after focused legislative consideration, and not by the Judiciary forecasting Congress' likely disposition." *Microsoft*, 550 U.S. at 459. As this Court has explained, if there is a "loophole" in the extraterritorial reach of the patent law (and there is no reason to believe there is), then it is "properly left for Congress to consider, and to close if it finds such action warranted." *Id.* at 457.

CONCLUSION

For the foregoing reasons, this Court should reverse the decision of the Federal Circuit.

Respectfully submitted,

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